

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF DELAWARE

IN THE MATTER OF THE INVESTIGATION)
INTO THE ADOPTION OF PROPOSED)
RULES AND REGULATIONS TO ACCOMPLISH)
INTEGRATED RESOURCE PLANNING FOR THE) PSC REGULATION DOCKET NO. 60
PROVISION OF STANDARD OFFER SERVICE)
BY DELMARVA POWER & LIGHT COMPANY)
UNDER 26 DEL. C. § 1007(c) & (d))
(OPENED AUGUST 21, 2007))

FINDINGS AND RECOMMENDATIONS OF THE HEARING EXAMINER

DATED: October 24, 2008

RUTH ANN PRICE
SENIOR HEARING EXAMINER

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FINDINGS AND RECCOMENDATIONS OF THE HEARING EXAMINER

Ruth Ann Price, duly appointed Hearing Examiner in this Docket pursuant to Del. C. § 502 and 29 Del. C. § 101 reports to the Commission as follows:

I. APPEARANCES

On behalf of Delmarva Power & Light Company ("Delmarva" or "DP&L" or "the Company"):

Todd L. Goodman, Esquire
Thomas D. Walsh, Esquire
Jack Barrar

On behalf of the Public Service Commission Staff ("Staff"):

James McC. Geddes, Esquire
Brooke E. Leach, Esquire
Janis Dillard, Regulatory Policy Administrator
Pamela R. Knotts, Public Utilities Analyst
David Bloom, Public Utilities Analyst

On behalf of the Division of the Public Advocate:

John Citrolo, Deputy Public Advocate

On behalf of himself: Dr. Jeremy Firestone, Esquire, pro se

On behalf of the Clean Air Council:

Michael D. Fiorentino, Esquire

On behalf of Delaware Energy Office: Brian P. Gallagher

On behalf of Green Delaware: Alan J. Muller

II. PROCEDURAL BACKGROUND

1. In PSC Order No. 7263 (Aug. 21, 2007), the Commission opened this docket to consider promulgating rules to govern DP&L's development of Integrated Resource Plans, or IRPs, for its Standard Offer Service ("SOS") customers, as authorized by the Electric Utility Retail Customer Supply Act of 2006 ("the Act" or "EURCSA").¹ EURCSA requires Delmarva to file with the Public Service Commission (the "Commission") an IRP on December 1 of even numbered year beginning in 2006. The Act mandates DP&L to evaluate "all available supply options" during a ten (10) year planning period in order to "acquire sufficient, efficient and reliable resources over time to meet its customers' needs at a minimal cost." See 26 Del. C. § 1007(c)(1). Pursuant to the Commission's Order, the Staff drafted proposed IRP rules after consulting with the parties in DP&L's ongoing IRP docket (PSC Docket No. 07-20) and with the three (3) state agencies involved in DP&L's IRP process.² On November 14, 2007, Staff submitted a set of proposed rules entitled "Integrated Resource Planning Regulation."

2. In PSC Order No. 7318 (Dec. 4, 2007), the Commission accepted Staff's draft rules and initiated the formal rule-making procedure dictated by the Administrative Procedures Act (APA).³

¹See 26 Del. C. § 1007(c)(1) (as amended by 75 Del. Laws ch. 242 § 6 (2006)).

²Under 26 Del. C. 1007(c)(2), DP&L files its IRP on a biennial basis with the Commission, the Delaware Energy Office, the Controller General, and the Director of the Office of Management and Budget.

³See 29 Del. C. § 10111, et seq.

3. Pursuant to 29 Del. C. §§ 1133 and 10115(a), the Commission's Secretary transmitted to the Registrar of Regulations for publication in the Delaware Register of Regulations a copy of PSC Order No. 7318 and a copy of the proposed "Integrated Resource Planning Regulations."

4. The Secretary also caused such Notice of Proposed Rule-Making to be published in The News Journal and the Delaware State News newspapers on December 19, 2007.

5. The Commission further ordered that written comments, suggestions, compilations of data, briefs or other written materials could be filed on or before February 1, 2008.

6. On March 12, 2008, a duly noticed evidentiary hearing was held to consider Staff's proposed rules. As a result of that hearing, I have prepared an exhibit log listing all exhibits. Further, I have considered all of the record evidence and, based thereon, I submit for the Commission's consideration these findings of fact and recommendations.

III. SUMMARY OF THE EVIDENCE

A. The March 12, 2008 Evidentiary Hearing

7. Pursuant to 29 Del. C. § 10117, the Commission conducted a public hearing on Staff's proposed "Integrated Resource Planning Regulation" on Wednesday, March 12, 2008 at 10:00 A.M. at the Commission's office located at 861 Silver Lake Boulevard, Cannon Building, Suite 100, Dover, Delaware. The record, as developed at the

hearing, consists of a 170-page verbatim transcript and seven (7) exhibits.⁴

8. The following pre-hearing comments were filed in this matter with their corresponding filing dates:

Name of Person/Entity Filing Comments/
Date of Comments

- a. Sustainable Energy Utility (SEU) Task Force;
August 15, 2007
- b. Jeremy Firestone; October 11, 2007
- c. Bluewater Wind, LLC; October 12, 2007
- d. Delmarva Power and Light (DP&L); February 1, 2008
- e. Delaware Energy Office (DEO); February 1, 2008
- f. Clean Air Council; February 1, 2008

The Commission permitted the Clean Air Council to formally Intervene in this matter by PSC Order No. 7305 (Nov. 6, 2007).

9. At the conclusion of the March 12, 2008 hearing, I permitted the parties/participants who attended to submit post-hearing briefs. Since there had been ample time for filing pre-hearing comments, I limited the post-hearing briefs to issues raised in the hearing. Tr. 168. Specifically, I stated at the hearing: "The participants are cautioned that they are to limit their comments only to the disputed rules which were discussed today and no other." Tr. 168. Despite my instructions, the Clean Air Council and Dr. Jeremy Firestone submitted a joint Post-Hearing Brief that contained many new revisions to the rules. Although for purposes of

⁴References to the transcript of the evidentiary hearing are referred to as "Tr. _." Exhibits are referred to as "Ex _."

this matter, I considered and reviewed all of the proposals submitted by the Clean Air Council and Dr. Firestone.

10. **Staff's March 3, 2008 Proposed Rules:** At the March 12, 2008 hearing, the PSC Staff proffered into evidence the Staff's draft of the "Integrated Resource Planning Regulation" ("Redlined Version", dated March 3, 2008). See Ex. "5". The Staff's March 3rd draft considered the comments submitted in 2007 as well as the comments submitted in February, 2008 by DP&L, the Delaware Energy Office, and the Clean Air Council. See Exs. 2 and 3, respectively. DP&L also submitted pre-hearing comments. See Ex. "4". The proposed regulations were discussed in depth at the evidentiary hearing on March 12, 2008. However, for purposes of this report, I will discuss only those rules that were deliberated at the evidentiary hearing but were still in dispute at the conclusion of the hearing.

B. Summary of Comments by the Parties and the Participants Submitted in February 2008, Testimony at March 12, 2008 Hearing, and Post-Hearing Briefs submitted by the Parties.

11. After the March 12, 2008 hearing, post-hearing briefs were submitted by DP&L (March 12, 2008), and the Clean Air Council/Jeremy Firestone (March 19, 2008). After considering these briefs, the PSC Staff issued another revised draft of the proposed rules on March 31, 2008, in which they adopted some the proposed revisions suggested by the Clean Air Council and Dr. Firestone. Staff's March 31, 2008 proposed rules are attached hereto as Attachment "A." Thus, in reaching my recommendations contained in this Report, I reviewed, considered, and evaluated all of the pre-hearing comments and submissions, the testimony and exhibits propounded at the evidentiary

hearing, and the post-hearing briefs including their attachments. For convenience of reference, I have attached the jointly proposed post-hearing revisions of the Clean Air Council and Dr. Jeremy Firestone as Attachment "B."

IV. DISCUSSION

12. The majority of the discussion of the parties and participants related to the following proposed Rules:

- a. Rule 1.7 (in "General" Paragraph) and Definition of "Commission Acknowledgement" in Paragraph 2 "Definitions"

13. These two (2) rules address the Commission's acknowledgement of an IRP filing.⁵ The intent of the rules is to make clear that the mere filing of an IRP does not constitute the Commission's approval of that IRP. Tr. 57, 74. Staff's March 31, 2008 draft of Rule 1.7 provides:

- 1.7. Commission Acknowledgement of a filed IRP implies only that the plan is in compliance with this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012. The acknowledgement of an IRP does not confer or imply Commission approval unless so stated by the Commission, and shall occur after Staff's analysis of and public comment on the proposed IRP. Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the acknowledgement.

14. Further, the phrase "Commission Acknowledgement" is defined in Section 2.0, the "Definitions" section as:

"Commission Acknowledgement" means that the Commission enters into an order that finds the

⁵A related, but unchanged provision, is Rule 9.3 in the "Review and Comment" Paragraph addressing post-IRP filing review and permitting comment by the Commission and State Agencies.

plan is in compliance with the initial filing requirements of this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012.

Tr. 57, 74.

15. In response to these provisions, the Clean Air Council argued that it would be the better course to abandon the term "Acknowledgement" in its entirety and substitute it with the concept of an "Approval." However, insertion of the word "approval" materially changes the meaning of more than this section as it is a concept that flows throughout the document. Such an extensive rewrite of the rules is not warranted in order to clarify and distinguish the treatment accorded an initial filing from a filing that has been vetted through the pre-hearing and evidentiary process.

16. The Clean Air Council argued that acknowledgement of an IRP should be made after the filing had been subjected to discovery and an evidentiary hearing. See Post-hearing Brief of the Clean Air Council, Mar. 31, 2008).

b. Definition of "Environmental Benefit" in Section 2:

17. As proposed by Staff, "Environmental Benefit" is defined as "the positive environmental impact of environmental services, practices, or other ecological influences attained by specific actions, minus the negative environmental impacts caused by those actions. Staff will give due consideration to input from DNREC."

18. The Clean Air Council and Dr. Firestone argued that the language "environmental impacts" was insufficient and unsubstantiated. In addition, they contended that the term "health effects" should also be included in the rule. However, after due discussion, Staff's

position remained unchanged that this suggested language was not necessary. See Post-hearing IRP Rules submitted by James McC. Geddes, Esquire, attached hereto as Attachment "A."

c. Definition of "Price Stability" in Section 2.0:

19. As proposed by Staff, this definition is acceptable except that I suggest the following change to the definition of "price stability": "The lack of significant variation in the actual ~~real~~ price paid by SOS customers over the planning period." The point here is to make the price to be used as the measuring stick more concrete and identifiable.

20. The Clean Air Council and Jeremy Firestone proposed a variation of a definition of "price stability" set forth by former Federal Chairman Alan Greenspan which this Hearing Examiner finds is not helpful to the issue under examination. According to Alan Greenspan, "price stability" occurs when households and businesses need not factor expectations of changes in the average level of prices in their decisions. Tr. 64.

d. Definition relating to "Plan Development" in Paragraph 6.0;

21. The following Subsection 6.1.3 as proposed by Staff relates to DP&L formulating its potential plans for supply and demand-side resource scenarios:

6.0 Plan Development.

6.1.3 Estimate a range of external costs which may be intangible, in order to show how explicit consideration of them might affect selection of options. The utility shall attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar

estimates of the costs of such externalities.

22. The Clean Air Council and Dr. Firestone contended that health costs and environmental damage should be specifically included as "intangible costs" or "external costs." See Attachment "B." However, Staff's argument that the language as proposed already covered those subjects.

e. Other Issues

23. **Paragraph 4.0/Load Forecast.** There was discussion as to whether carbon credits could affect load growth and whether carbon credits should be specifically addressed in Paragraph 4.0. Staff recommended that carbon credits not be specifically addressed since the subject was already encompassed within Paragraph 4.0. Staff's position was, since load forecasting is required, and economic factors must be considered, if carbon credits impact an IRP, the subject will be included in the IRP. Tr. 119-20. Staff noted that many economic and environmental factors can affect an IRP.

24. **Section 5.7/Sustainable Energy Utility ("SEU").** Staff testified that the SEU has the *specific* jurisdiction to develop, coordinate, and implement energy efficiency programs for end-users/customers in Delaware. Tr. 44. See 29 Del. C. § 8059(b) (describes functions of SEU). However, as it relates to IRPs, it is Staff's position that DP&L may propose an energy efficiency program in its IRP since the SEU does not have *exclusive* jurisdiction as to this issue. *Id.*

V. FINDINGS AND RECCOMENDATIONS

25. Under 26 Del. C. § 209(a), the Commission has the authority and jurisdiction to adopt regulations governing this public utility.

26. Except for the following recommended revisions, I recommend that Staff's proposed Regulations dated March 31, 2008 be adopted by the Commission. Further, I recommend the following three (3) revisions to the Staff's proposed regulations: (the **bold** language below within the revised rules is new language recommended by this Hearing Examiner; the lined-through language is language proposed by Staff, which I do not recommend that the Commission approve).

A. Revisions to Paragraph 1.7 and Paragraph 2.0 of Staff's proposed Rules/ Definition of "Commission Acknowledgement."

1.7. Commission Acknowledgement of a filed IRP implies only that the plan is in compliance with the initial filing requirements of this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012. The acknowledgement of an IRP does not confer or imply Commission approval unless so stated by an Order of the Commission. **Approval or disapproval of an IRP must be made by the Commission after, at a minimum, Staff's analysis of and public comment on the proposed IRP.** Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the acknowledgement.

2.0. Commission Acknowledgement means that the Commission enters into an order that finds that the plan is in compliance with **the initial filing requirements of** this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del C. S 1001-1012.

B. Revision to Paragraph 2.0/Definition of "Price Stability":


"Price Stability" means the lack of significant variation in the **actual real**

price paid by SOS customers over the
planning period.

27. For the above reasons, I recommend that the Commission adopt, as just, reasonable, and in the public interest, the Hearing Examiner's proposed, revised Regulations as contained in Attachment "C" hereto.

28. A form of Order implementing the foregoing recommendations is attached as Attachment "D" for the Commission's consideration.

Respectfully Submitted,


Ruth Ann Price,
Senior Hearing Examiner

DATED: October 24, 2008

ATTACHMENT “A”

State of Delaware

Delaware Public Service Commission

Integrated Resource Planning Regulation

DELAWARE PUBLIC SERVICE COMMISSION’S

STAFF

Redlined Version

March 31, 2008

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1.0 General

- 1.1. The Reliability of electric service and the security of energy supply are of great importance to the Delaware Public Service Commission ("Commission"), because they are essential services to the citizens of Delaware. This regulation, in support of 26 Del. C. §1007, sets forth the minimum Delmarva Power and Light ("DP&L" or "Company") Integrated Resource Plan ("IRP" or "the Plan") requirements needed to ensure a cost effective, price stable, reliable, efficient and environmentally sound energy supply for all Standard Offer Service ("SOS") customers.
- 1.2. Nothing in this regulation relieves DP&L from compliance with any requirement set forth under any other regulation, statute, or order. Compliance with this regulation meets the minimum IRP requirements. Compliance with this regulation does not imply plan approval or automatic cost recovery.
- 1.3. In accord with 26 Del. C. §1007, DP&L, as the Standard Offer Service Supplier, shall file an IRP on December 1st, 2006 and on the anniversary date of the first filing date every other year thereafter (i.e. 2008, 2010 et seq.). The Company may request and the Commission may change the filing date for good cause shown. These regulations shall apply to all IRPs filed pursuant to 26 Del. C. §1007. These regulations shall not apply to an IRP docket opened prior to the effective date of these regulations.
- 1.4. The IRP shall be filed in compliance with normal Commission policies and practices.
- 1.5. The plan shall identify the year of the filing, the individuals responsible for its preparation and those individuals who shall be available to respond to inquiries during the Commission's review of the plan.
- 1.6. Because an IRP may contain business sensitive information, the Company may request that information, required under this regulation, be classified as confidential, proprietary and/or privileged material. The Company must attest that such information is not subject to inspection by the public or other parties without execution of an appropriate proprietary agreement. In requesting such treatment of information the Company is also obligated to file an additional copy of the information, excluding the confidential or proprietary information. The Commission, in accordance with Rule 11, Rules of Practice and Procedure of the Delaware Public Service Commission, effective May 10, 1999, shall treat such information as "confidential, not for public release" upon receipt of a properly filed request. Any dispute over the confidential treatment of information shall be resolved by the Commission, designated Presiding Officer or Hearing Examiner. Confidential utility documents shall be presented under separate seal.
 - 1.7. Commission Acknowledgement of a filed IRP implies only that the plan is in compliance with this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012. The acknowledgement of an IRP does not confer or imply Commission approval unless so stated by the Commission, and shall occur after Staff's analysis of and public comment on the proposed IRP. Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the acknowledgement.
- 1.8. The utility shall provide whatever detail and commentary necessary to demonstrate that it has met or exceeded the planning requirements as set forth in this regulation. An effort shall be made to ensure that the IRP is clearly stated and can be readily comprehended by the Commission, State Agencies, and other interested parties. The IRP shall include an Executive Summary.
- 1.9. Compliance with this regulation is a minimum standard for IRPs. The Company needs to exercise its professional judgment based on its systems and customer needs. The Company shall include all

information that assists the reader to fully understand the IRP concept and the Company's plans to meet SOS energy needs.

- 1.10. This regulation requires the maintenance and retention of supply resource planning data and the reporting of plan achievements on an annual basis starting in 2009 to the Commission, Governor and General Assembly. The Company shall retain such data, consistent with Federal data retention guidelines and make it available for further review as necessary
- 1.11. The Company shall submit a total of 14 copies of its IRP - eight (8) copies to the Commission, two (2) copies to the Controller General's office, two (2) copies to the Office of Management and Budget, and two (2) copies to the Energy Office. The Commission may request up to six (6) additional copies of combined and common filings as may be necessary for review.
- 1.12. These Integrated Resource Planning Regulations shall be effective for IRP dockets opened after the effective date of these regulations and may be reviewed, revised, or extended as necessary to ensure continued compliance with 26 Del. C. § 1001-1012 and to ensure adequate SOS energy supply.

1.13. Failure of the Company to file an IRP or to provide progress reports as required may subject the Company to the penalty and remedial provisions of the Delaware statute (26 Del. C. §1019).

2.0 Definitions

The following words and terms, as used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise.

"Brownfield" or "Industrial site" means a site that has been previously used for industry and may be contaminated, or need environmental remediation for continued use or redevelopment.

"Capacity" means the maximum power capability of a piece of equipment. For example, a generating unit might have a rated capacity of 50 megawatts.

"Commission" means the Delaware Public Service Commission.

"Commission Acknowledgement" means that the Commission enters into an order that finds the plan is in compliance with **the initial filing requirements** of this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012.

"Conservation" means any reduction in electric power consumption that results from improved efficiency, avoidance of waste, reduced consumption, or other energy usage reductions that may result from installing new equipment, modifying existing equipment to improve efficiency, adding insulation or changing behavior patterns.

"Customer-Sited Generation" means a generation unit that is interconnected on the end-use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

"Demand Response ("DR")" means programs that are designed specifically to reduce electricity demand during periods of supply constraint. These programs do not necessarily reduce total annual energy consumption.

“Demand-Side Management (“DSM”)” means cost effective energy efficiency programs that are designed to reduce customers’ electricity consumption, especially during peak periods.⁶

“DNREC” means the Department of Natural Resources and Environmental Control

“DP&L” or “Company” means Delmarva Power & Light Company, Inc. or its successor organizations.

“Energy” means electrical energy. In this sense, energy is a measure of the quantity of units of electricity used in a given time period, measured in megawatt- hours.

“Environmental Benefit” means the positive environmental impact of environmental services, practices or other ecological influences attained by specific actions, minus the negative environmental impacts caused by those actions. Staff will give due consideration to input from DNREC.

“Fuel Diversity” means the utilization of resources to supply energy to SOS customers that are procured in such a way as to diminish the risk of adverse changes in fuel prices for electric generation, either through a mix of electric generating resources that utilize a variety of fuel sources, fuel hedges, Customer-Sited Generation resources, both renewable and nonrenewable, application of appropriate risk management practices, DSM or a combination of these activities and assets.

“Generation Attributes” means non-price characteristics of the electrical energy output of a generation unit including, but not limited to, the units fuel type, geographical location, emissions, vintage and Renewable Energy Portfolio Standards (26 Del. C. § 351-363) eligibility.

“Implementation Plan” means an action plan which outlines the short and long term planned actions of the Company to secure necessary energy, capacity, transmission and other appropriate resources as further described in the Integrated Resource Plan.

“Integrated Resource Plan (IRP)” means the planning process of an Electric Distribution Company that systematically evaluates all available options, including but not limited to: generation, Supply Contracts, transmission and Demand-Side Management programs during the planning period to ensure that the electric distribution Company acquires sufficient and reliable resources over time that meet their customers’ needs at a minimal cost.⁷

“Integrated Resource Evaluation” means a process within the IRP that considers and compares supply- and demand-side resources to select a final resource mix.

“Load Forecast” means the estimated future annual electricity usage, that is used to help electric utilities make resource allocation decisions.

“New or Innovative Baseload Technologies” means energy resources using new technologies to generate electricity on a typical round- the- clock basis.

“PJM Interconnection, L.L.C. (‘PJM’)” means the Regional Transmission Organization or successor organization that is responsible for wholesale electricity markets and the interstate transmission of electricity throughout a multi-state operating area that includes Delaware.

“Portfolio” or “Resource Portfolio” means the combination of physical assets (e.g. electric generating, self generating, and transmission assets), financial products (e.g. Supply Contracts for energy and related services), market resources (e.g. spot market energy purchases), DSM and DR programs, and Customer-Sited Generation resources, both renewable and non renewable, that the Electric Distribution Company uses to satisfy current and future energy procurement requirements for SOS customers, while managing the risk of adverse price changes to SOS customers.

⁶ 26 Del. C. §1001 (5)

⁷ 26 Del. C. §1001,(13)

"Plan Objectives" means the targets or goals of an IRP plan needed to measure the impact and/or success of the plan's actions. Such goals or targets must be definitive, measurable and verifiable. Refer to 1.1 for IRP objectives.

"Price Stability" means the lack of significant variation in the real price paid by SOS customers over the planning period.

"Reliability" means the degree of performance of the elements of the bulk electric system that results in electricity being delivered to customers within accepted standards and in the amount desired. Reliability may be measured by the frequency, duration, and magnitude of adverse effects on the electric supply. Electric system Reliability can be addressed by considering two basic and functional aspects of the electric system – Adequacy and Security.

Adequacy is the ability of the electric system to supply the aggregate electrical demand and energy requirements of customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.

Security is the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.⁸

As applied to distribution facilities, Reliability is further described as the degree to which safe, proper and adequate electric service is supplied to customers without interruption.

"Resource Portfolio" see **"Portfolio"**

"Retail Competition" means the right of a customer to purchase electricity from a certified electric supplier.

"Standard Offer Service ("SOS")" means the provision of electric supply service by a Standard Offer Service Supplier to customers who do not otherwise receive electric supply service from a certified electric supplier.

"Standard Offer Service Supplier" means the electric distribution company serving within its certificated service territory.

"Supply Contracts" means short or long term power procurement contracts as may be negotiated and agreed upon to meet defined requirements, more specifically for Delaware's Standard Offer Service customers.

"Transmission Service" means the delivery of electricity from supply sources through transmission facilities to distribution system interconnection points.

"Scenario Analysis" means a component of integrated resource planning that analyzes and assigns probabilities to a variety of possible future conditions and the options available to deal with them. Its primary purpose is to facilitate better resource planning decisions by assessing and quantifying the economic and other risks related to a particular decision.

"Wholesale Electricity Market" means the various PJM markets in which the purchase and sale of electric energy, capacity, and ancillary services from generators to resellers/wholesale suppliers (who sell to retail customers) takes place at the transmission level.

3.0 General Requirements

3.1 Consistent with the requirements of 26 Del. C. §1007 and this regulation, the Company shall file an IRP every two years, starting on

⁸ NERC definition - NERC's Reliability Assessment 2001–2010, dated October 16, 2001.

December 1 of the first even-numbered year after the effective date of these regulations, that adheres to the following general principals:

3.1.1 The IRP shall provide a framework for comparing a comprehensive resource mix of supply- and demand-side and Transmission Service resource costs and attributes.

- 3.1.2. The IRP shall utilize a Resource Portfolio in achieving the objectives of the IRP, shall incorporate a Portfolio approach to securing resources and incorporating an analysis of risk versus certainty into the planning process, or absent such a Portfolio approach, the rationale supporting the exclusion.
- 3.1.3. The IRP process shall provide for regulatory, stakeholder and public input.
- 3.1.4. The IRP shall include provisions for the IRP to be modified from time to time, as may be necessary to conform with any subsequent legislative or regulatory directives.

3.2 The IRP shall include the following minimum requirements:

- 3.2.1. An executive summary with a short description of the utility, its customers, service territory, current facilities, planning objectives, notable areas of departure in the new IRP from the old, citing specific location within the IRP where the new aspects shall be found, Load Forecast, recommended Resource Portfolio and action plan.
- 3.2.2. Established Plan Objectives in quantitative and qualitative terms by which the plan achievements may be measured and shall not be biased against any particular option. Measures must be ascribed to each objective. The Company must include a summary of the overall process, and models used in developing the IRP.
- 3.2.3. A description of the load forecast, the assumptions used or implicit in creating the forecast, the range of forecast examined, and the forecast selected for the filing period.
- 3.2.4. A listing of all the options considered to meet the load forecast, identification of those chosen for further evaluation and possible inclusion in the plan, and a discussion of the rationale for such selections including any key assumptions. This planning information shall include a 10-year planning horizon, starting with the year immediately following the filing year (i.e. filing year of 2010 shall include planning information for years 2011 through 2020).
- 3.2.5. A description of the Scenario Analysis used to integrate the options into a single resource plan or individual scenario for further review and analysis, to include a listing of the various scenarios considered and any key assumptions.
- 3.2.6. A description of the process used to develop the proposed IRP, including the assumptions and analysis leading up to the decision and the application of the valuation criteria as specified in section 5.0.
- 3.2.7. An analysis of the risk and sensitivity of the proposed IRP in comparison to other options also considered.
- 3.2.8. Action plans for implementation of the IRP, for no less than five (5) years, starting with the year immediately following the filing year.

4.0 Load Forecast

The Company shall consider a range of load growth forecasts that include:

- 4.1 Both historical data and future estimates.
- 4.2 Both winter and summer peak demand for total Delmarva Delaware load and Delmarva Delaware SOS load by customer class.
- 4.3 Weather adjustments, including consideration of climate change potential.
- 4.4 Five (5) year historical loads, current year-end estimate and ten (10) year weather adjusted forecast showing individually and aggregated Delmarva Delaware and Delmarva Delaware SOS load, and both Delmarva Delaware and Delmarva Delaware SOS load disaggregated by customer classes, including both capacity (MW) and energy requirements (MWh).
- 4.5 Analyses of how existing and forecast Conservation, DR, DSM, Customer-Sited Generation, various economic and demographic factors, including the price of electricity, will affect the consumption of electric services, and how customer choice under Retail Competition of utility service may affect future loads.
- 4.6 Description of the process the company used to develop these forecasts. Forecasts shall include the probability of occurrence. Within the forecasting modeling descriptions the Company shall demonstrate how well its model predicted past load data for the prior five (5) years.

5.0 Resource Portfolio Options

- 5.1 The Company shall include a description of the overall process and the analytical techniques it used to identify its proposed options. The Company shall not rely exclusively on any particular resource or purchase procurement process.
- 5.2 The Company shall identify and evaluate all reasonable generation, Supply Contracts, both short- and long-term procurement and demand- side and demand response management strategies , even if a particular strategy is ultimately not recommended by the Company. The IRP must show an investigation of all reasonable opportunities for a more diverse supply at the lowest reasonable cost. It shall contain a description of each option and an evaluation that considers the economic and environmental value of the following:
 - 5.2.1 Resources that utilize New or Innovative Baseload Technologies;
 - 5.2.2 Resources that provide short or long term Environmental Benefits to the citizens of this State;
 - 5.2.3 Facilities that have existing fuel and transmission infrastructure;
 - 5.2.4 Facilities that utilize existing brownfield or industrial sites;
 - 5.2.5 Resources that promote Fuel Diversity;
 - 5.2.6 Resources or facilities that support or improve Reliability; or
 - 5.2.7. Resources that encourage Price Stability.
- 5.3 The Company shall provide a description of the options recommended for inclusion in the proposed plan, including a description of the mechanism or process used for valuing each option. Such valuation shall also include consideration for the life expectancy of the resource, if the resource provides capacity and/or energy, any improvements to system Reliability, the dispatchability of the source, any lead time requirements, the flexibility of the resource, the Generation Attributes of the resource, the efficiency of the resource, and the opportunities for customers' participation. The valuation shall assess the probability of securing the options according to modeling information used, including any key assumptions. The Company shall provide the estimated energy and capacity impacts for each option and the rationale behind the estimate.

- 5.4 Where Transmission Service is identified as a planning option, the Company shall describe the transmission enhancement, the location, and provide PJM's assessment of the impact of the proposed transmission asset when available.
- 5.5 At least 30 percent of the resource mix shall be acquired through the regional Wholesale Electricity Market via a bid procurement or auction process held by DP&L. (Docket No. 04-391).
- 5.6 The Company shall also include discussion of known plans to reduce existing physical, contractual or service related Portfolio resources during the IRP planning period.
- 5.7 The Company shall evaluate all technically feasible and cost effective DR improvements. Where non-Company evaluations of DSM and Conservation are available through the Sustainable Energy Utility (or other organization as requested by the Commission), the Company shall summarize the results and actions taken. Where DR programs are new, the Company shall summarize the anticipated benefits with respect to load reductions and provide supporting material to justify the new program. Any Company proposed DSM program rejected by the SEU may be included in the IRP.
- 5.8 The Company shall assess the Resource Portfolio options against the set of Plan Objectives and criteria.

6.0 Plan Development

- 6.1 The Company shall conduct an Integrated Resource Evaluation in formulating its potential plans for supply and demand-side resource scenarios. The Company shall describe the mechanism or process by which the the Load Forecast and options have been blended into the various IRP scenarios. In integrating its supply and demand-side resources, the Company shall:
 - 6.1.1 Provide a discussion of how the Company might alter the recommended plan in the future if the key planning assumptions used to develop the recommended plan in the future turn out to be different than what was assumed in preparing the recommended plan.
 - 6.1.2 Evaluate the cost-effectiveness of the options from the perspectives of the utility and the different classes of ratepayers.
 - 6.1.3 Estimate a range of external costs which may be intangible, in order to show how explicit consideration of them might affect selection of options. The utility shall attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.
 - 6.1.4 Evaluate the financial, competitive, Reliability, and operational risks associated with the options recommended by the IRP and how these risks may be mitigated over the 10 year planning period. Each candidate plan shall include a discussion of the likelihood of the occurrence of such risks.
 - 6.1.5 For the options included in the proposed plan identified in the IRP, the IRP shall include an analysis of the fuel risk associated with the proposed Resource Portfolio and how such fuel risk will be mitigated when the proposed plan is implemented.
 - 6.1.6 Perform sensitivity analyses on each of the candidate plans to include variations in key assumptions and to assess the likelihood of planned outcomes.
- 6.2 In developing candidate plans, special attention shall be given to ensuring consistency between the IRP and typical rate-making processes. While the ultimate consumer price associated with the plan is important, the stability of rates and other factors as described in Section 5.2 need to be considered in any candidate plan selection.

7.0 Proposed Plan Selection.

7.1 The Company shall select and file the proposed IRP which it believes is the most consistent with the criteria set forth in 26 Del. C. § 1007. The Company shall describe the rationale behind its selection, including any modeling or methodology used as the basis for selection of the proposed plan.

7.2 In filing the proposed IRP, the Company shall provide at a minimum a five (5) year forecast of supply rates by customer class that would be anticipated based on the IRP planning assumptions and recommended procurement strategy.

8.0 Implementation Plan

8.1 As part of the IRP, the Company shall file ~~an action~~ a plan needed to implement the IRP. Such plan shall be a five (5) year action plan outlining the resource decisions intended to implement the IRP. The ~~action~~ Implementation plan shall include:

- 8.1.1 Actions to be taken in the first two (2) years and outline actions anticipated in the last three (3) years.
- 8.1.2 For IRP's filed on or after December 1, 2010, a status report of the specific actions contained in the previous action plan, including what risk assumptions were made and what actually occurred.
- 8.1.3 Schedule of key activities related to the plan implementation.

9.0 Review and Comment

9.1 As part of the process commencing in 2009 and continuing on an annual basis, the Company shall submit a report to the Commission, the Governor and the General Assembly detailing their progress in implementing their IRPs.

9.2 The Commission, interested State Agencies, interested parties and the general public shall be provided an opportunity for review and comment on the Company's IRP filings.

9.3 Subsequent to the IRP filing and public comment, the Commission and interested State Agencies may acknowledge the filing of the Company's IRP and its compliance with these regulations. Acknowledgement that the IRP complies with the statute shall not guarantee a particular ratemaking treatment of future resource acquisitions. To the extent that the

Commission determines that the IRP is not compliant with the statute or is unlikely to meet the goals of the statute, the Company shall revise its IRP to meet these requirements. Rate treatment shall be addressed in rate or other proceedings as filed by the utility or as initiated by the Commission.

9.4. The Integrated Resource Plan may be used as a factor in rate cases to evaluate the performance of the utility. Reports provided under this regulation are subject to annual review and audit by the Commission and interested State Agencies. The Company must maintain sufficient records to permit a review and confirmation of material contained in all required reports.

ATTACHMENT “B”

State of Delaware

Delaware Public Service Commission

Integrated Resource Planning Regulation

BlueRedlined Version

~~November 14~~ March 193, 2008⁷

JOINT VERSION OF DR. JEREMY FIRESTONE

AND

MICHAEL D.FIORENTINO, ESQUIRE OF THE

CLEAN AIR COUNCIL

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1.03.0 General

~~1.1.5.~~ The Reliability of electric service and the security of energy supply are of great importance to the Delaware Public Service Commission ("Commission"), because they are essential services to the citizens of Delaware. This regulation, in support of 26 Del. C. §1007, sets forth the minimum Delmarva Power and Light ("DP&L" or "Company") Integrated Resource Plan ("IRP" or "the Plan") requirements needed to ensure a cost effective, price stable, reliable, efficient and environmentally sound energy supply for all Standard Offer Service ("SOS") customers.

~~1.2.1.6.~~ Nothing in this regulation relieves DP&L from compliance with any requirement set forth under any other regulation, statute, or order. Compliance with this regulation meets the minimum IRP requirements. Compliance with this regulation does not imply plan approval or automatic cost recovery.

~~1.3.1.7.~~ In accord with 26 Del. C. §1007, DP&L, as the Standard Offer Service Supplier, shall file an IRP on December 1st, 2006 and on the anniversary date of the first filing date every other year thereafter (i.e. 2008, 2010 et seq.). The Company may request and the Commission may change the filing date for good cause shown. These regulations ~~will~~ shall apply to all IRPs filed pursuant to 26 Del. C. §1007. - An IRP filed prior to the date of these regulations but not yet approved by the Commission shall be consistent with these rules to the maximum extent practicable. These regulations shall not apply to an IRP docket opened prior to the effective date of these regulations.

~~1.4.1.8.~~ The IRP ~~will~~ shall be filed in compliance with normal Commission policies and practices.

1.5. The plan shall identify the year of the filing, the individuals responsible for its preparation and those individuals who shall be available to respond to inquiries during the Commission's review of the plan.

1.6. Because an IRP may contain business sensitive information, the Company may request that information, required under this regulation, be classified as confidential, proprietary and/or privileged material. The Company must attest that such information is not subject to inspection by the public or other parties without execution of an appropriate proprietary agreement. In requesting such treatment of information the Company is also obligated to file an additional copy of the information, excluding the confidential or proprietary information. The Commission, in accordance with Rule 11, Rules of Practice and Procedure of the Delaware Public Service Commission, effective May 10, 1999, ~~will~~ shall treat such information as "confidential, not for public release" upon receipt of a properly filed request. Any dispute over the confidential treatment of information shall be resolved by the Commission, designated Presiding Officer or Hearing Examiner. Confidential utility documents shall be presented under separate seal.

1.7. Commission Approval of an IRP indicates that the plan is in compliance with this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012. Commission Approval only occurs after the staff and public analysis and comment on the proposed IRP, discovery, evidentiary and public hearings, as appropriate, and staff recommendation to the Commission. Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the approval. .Commission Acknowledgement of a filed IRP implies only that the plan is in compliance with this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012., as put forth, does not appear

~~to be unreasonable to the Commission at the time the acknowledgement is given. The acknowledgement of an IRP does not confer or imply Commission approval unless so stated by the Commission. Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the acknowledgement.~~

- 1.8. The utility shall provide whatever detail and commentary are necessary to demonstrate that it has met or exceeded the planning requirements as set forth in this regulation. An effort shall be made to ensure that the IRP is clearly stated and can be readily comprehended by the Commission, State Agencies, and other interested parties. The IRP ~~must~~ shall include an Executive Summary.

~~1.9.1.13.~~ Compliance with this regulation is a minimum standard for IRPs. The Company needs to exercise its professional judgment based on its systems and customer needs. The Company shall include all information that assists the reader to fully understand the IRP concept and the Company's plans to meet SOS energy needs.

~~1.10.1.14.~~ This regulation requires the maintenance and retention of supply resource planning data and the reporting of plan achievements on an annual basis starting in 2009 to the Commission, Governor and General Assembly. The Company shall retain such data, consistent with Federal data retention guidelines and make it available for further review as necessary

~~1.11.1.15.~~ The Company shall submit a total of 14 copies of its IRP - eight (8) copies to the Commission, two (2) copies to the Controller General's office, two (2) copies to the Office of Management and Budget, and two (2) copies to the Energy Office. The Commission may request up to six (6) additional copies of combined and common filings as may be necessary for review.

~~1.12.1.16.~~ These Integrated Resource Planning Regulations shall be effective for IRP dockets opened after the effective date of these regulations through December 1, 2014 and may be reviewed, revised, or extended as necessary to ensure continued compliance with 26 Del. C. § ~~1001-1012~~ 1007 and to ensure adequate SOS energy supply.

1.143. Failure of the Company to file an IRP or to provide progress reports as required may subject the Company to the penalty and remedial provisions of the Delaware statute (26 Del. C. §1019).

2.04.0 Definitions

The following words and terms, as used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise.

"Brownfield" or "Industrial site" means a site that has been previously used for industry and may be contaminated, or need environmental remediation for continued use or redevelopment.

"Capacity" means the maximum power capability of a piece of equipment. For example, a generating unit might have a rated capacity of 50 megawatts.

"Commission" means the Delaware Public Service Commission.

"Commission Approval~~acknowledgement~~" means only that the Commission has entered- into- an Order, subsequent to full staff and public analysis and comment, discovery, evidentiary and public hearings, and staff

recommendations, that finds the Integrated Resource Planplan ("IRP") is in compliance with this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012., Commission Approval of an IRP confers no direct or indirect guarantee of specific ratemaking treatment for the plan or any portions thereof. IRP as put forth does not appear to be unreasonable.

"Conservation" means any reduction in electric power consumption that results from improved efficiency, avoidance of waste, reduced consumption, or other energy usage reductions that may result from installing new equipment, modifying existing equipment to improve efficiency, adding insulation or changing behavior patterns.

"Customer-Sited Generation" means a generation unit that is interconnected on the end-use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

"Demand Response ("DR")" means programs that are designed specifically to reduce electricity demand during periods of supply constraint. These programs do not necessarily reduce total annual energy consumption.

"Demand-Side Management ("DSM")" means cost effective energy efficiency programs that are designed to reduce customers' electricity consumption, especially during peak periods.⁹

"DNREC" means the Department of Natural Resources and Environmental Control

"DP&L" or "Company" means Delmarva Power & Light Company, Inc. or its successor organizations.

"Energy" means electrical energy. In this sense, energy is a measure of the quantity of units of electricity used in a given time period, measured in megawatt- hours.

"Environmental Benefit" means ~~the positive~~ the positive environmental impact of environmental services, practices or other ecological influences attained by specific actions, minus the negative environmental impacts caused by those actions. Staff will give due consideration to input from ~~as determined by DNREC.~~ Environmental impacts include, but are not limited to, health effects.

"Fuel Diversity" means the utilization of resources to supply energy to SOS customers that are procured in such a way as to diminish the risk of adverse changes in fuel prices for electric generation, either through a mix of electric generating resources that utilize a variety of fuel sources, fuel hedges, Customer-Sited Generation resources, both renewable and nonrenewable, distributed and renewable resources, application of appropriate risk management practices, DSM or a combination of these activities and assets.

"Generation Attributes" means non-price characteristics of the electrical energy output of a ~~G~~ generation unit including, but not limited to, the ~~u~~ Units fuel type, geographical location, emissions, vintage and ~~RPS~~ Renewable Energy Portfolio Standards (26 Del. C. § 351-363) eligibility.

"Implementation Plan" means an action plan which outlines the short and long term planned actions of the Company to secure necessary ~~energysupply, capacitydemand,~~ transmission and other appropriate resources as further described in the Integrated Resource Plan.

"Integrated Resource Plan (IRP)" means the planning process of an Electric Distribution Company that systematically evaluates all available options, including but not limited to: generation, Supply Contracts, transmission and Demand-Side Management programs; during the planning period to ensure that the electric distribution Company acquires sufficient and reliable resources over time that meet their customers' needs at a minimal cost.¹⁰

⁹ 26 Del. C. §1001 (5)

¹⁰ 26 Del. C. §1001,(13)

“Integrated Resource Evaluation” means a process within the IRP that considers and compares supply- and demand-side resources to select a final resource mix.

“Load Forecast” means the estimated future annual electricity usage, ~~that is commonly measured as peak summer and winter demands,~~ and used to help electric utilities make resource allocation decisions.

“New or Innovative Baseload Technologies” means energy resources using new technologies to generate ~~energy-electricity~~ on a typical round-the-clock basis.

“PJM Interconnection, L.L.C. (‘PJM’)” means the Regional Transmission Organization or successor organization that is responsible for wholesale ~~energy-electricity~~ markets and the interstate transmission of ~~energy-electricity~~ throughout a multi-state operating area that includes Delaware.

“Portfolio” or “Resource Portfolio” means the combination of physical assets (e.g. electric generating, ~~self generating,~~ and transmission assets), financial products (e.g. Supply Contracts for energy and related services), market resources (e.g. spot market energy purchases), DSM and ~~energy-DR~~ efficiency programs, and ~~Customer-Sited Generation resources, both distributed and renewable and non renewable,~~ wable resources that the Electric Distribution Company uses to satisfy current and future energy procurement requirements for SOS customers, while managing the risk of adverse price changes to SOS customers.

“Plan Objectives” means the targets or goals of an IRP plan needed to measure the impact and/or success of the plan’s actions. Such goals or targets must be definitive, measurable and verifiable. Refer to 1.1 for IRP objectives.

“Price Stability” means a relative lack of variation in the real price paid by SOS customers over the planning period such that SOS customers need not factor expectations of changes in the average level of electricity prices in their economic decisions during the period. ~~the variation in the real price paid by SOS customers over the planning period.~~

“Reliability” means the degree of performance of the elements of the bulk electric system that results in electricity being delivered to customers within accepted standards and in the amount desired. Reliability may be measured by the frequency, duration, and magnitude of adverse effects on the electric supply. Electric system Reliability can be addressed by considering two basic and functional aspects of the electric system – Adequacy and Security.

Adequacy is the ability of the electric system to supply the aggregate electrical demand and energy requirements of customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.

Security is the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.¹¹

As applied to distribution facilities, Reliability is further described as the degree to which safe, proper and adequate electric service is supplied to customers without interruption.

“Resource Portfolio” see “Portfolio”

“Retail Competition” means the right of a customer to purchase electricity from a certified ~~n~~ Electric Supplier.

“Standard Offer Service (‘SOS’)” means the provision of electric supply service by a Standard Offer Service Supplier to customers who do not otherwise receive electric supply service from an certified electric supplier.

¹¹ NERC definition - NERC’s Reliability Assessment 2001–2010, dated October 16, 2001.

"Standard Offer Service Supplier" means the electric distribution company serving within its certificated service territory.

"Supply Contracts" means short or long term power procurement contracts as may be negotiated and agreed upon to meet defined requirements, more specifically for Delaware's Standard Offer Service customers.

"Transmission Service" means the delivery of electricity from supply sources through transmission facilities to distribution system interconnection points.

"Scenario Analysis" means a component of integrated resource planning that analyzes and assigns probabilities to a variety of possible future conditions and the options available to deal with them. Its primary purpose is to facilitate better resource planning decisions by assessing and quantifying the economic and other risks related to a particular decision.

"Wholesale Electricity Market" means the various PJM markets in which the purchase and sale of electric energy, capacity, and ancillary services from generators to resellers/wholesale suppliers (who sell to retail customers) takes place at the transmission level.

3.0 General Requirements

—3.1 Consistent with the requirements of 26 Del. C. §1007 and ~~these~~ this regulations, the Company shall file an IRP every two years, starting on December 1 of the first even-numbered year after the effective date of these regulations, that adheres to the following general principals:

—3.1.1 —The IRP shall provide a framework for comparing a comprehensive resource mix of supply- and demand-side and Transmission Service resource costs and attributes.

~~3.1.2.3.1.5.~~ The IRP shall utilize a Resource Portfolio in achieving the objectives of the IRP, shall incorporate a Portfolio approach to securing resources and incorporating an analysis of risk versus certainty into the planning process, or absent such a Portfolio approach, the rationale supporting the exclusion.

~~3.1.3.3.1.6.~~ The IRP process shall provide for regulatory, stakeholder and public input, ~~to the~~ formulation of the IRP.

~~3.1.4.3.1.7.~~ The IRP shall include provisions for the IRP to be modified from time to time, as may be necessary to conform with any subsequent legislative or regulatory directives.

~~3.2.3.3~~ The IRP shall include the following minimum requirements:

3.2.1. An executive summary with a short description of the utility, its customers, service territory, current facilities, and planning objectives, notable areas of departure in the new IRP from the old, citing specific location within the IRP where the new aspects shall be found, -Load Forecast, recommended Resource Portfolio and action plan.

~~3.2.2.3.2.7.~~ Established Plan Objectives in quantitative and qualitative terms by which the plan achievements may be measured and shall not be biased against any particular resource option. Measures must be ascribed to each objective. The Company must include a summary of the overall process, and models used in developing the IRP.

~~3.2.3.3.2.8.~~ A description of the demand and energyload forecast, the assumptions used or implicit in creating the forecast, the range of forecast examined, and the forecast selected for the filing period.

~~3.2.4.3.2.9.~~ A listing of all the resource options considered to meet the demand and energyload forecast, identification of those chosen for further evaluation and possible inclusion in the plan, and a discussion of the rationale for such selections including any key assumptions. This planning information shall include a full 10-year planning horizon, starting with the year immediately following the filing year (i.e. filing year of 2010 shall include planning information for years 2011 through 2020).

~~3.2.5.3.2.10.~~ A description of the process or Scenario Analysis used to integrate the demand and supply options into a single resource plan or individual scenario for further review and analysis, to include a listing of the various scenarios considered and any key assumptions.

~~3.2.6.3.2.11.~~ A description of the process used to develop the proposed recommended IRP, including the assumptions and analysis leading up to the decision and the application of the valuation criteria as specified in 26 Del. C. §1007 (c)(1)a. and b. section 5.0.

~~3.2.7.3.2.8~~ An analysis of the risk and sensitivity of the proposed recommended IRP in comparison to other options also considered.

~~3.2.9.~~ Planning information for a 10 year planning horizon, starting with the year immediately following the filing year (i.e. filing year of 2010 shall include planning information for years 2011 through 2020).

3.2.9. Action plans for implementation of the IRP, for no less than five (5) years, starting with the year immediately following the filing year.

4.0 Load Forecast

~~The Company shall consider a range of load growth forecasts that include:~~

4.1 ~~The Company shall consider a range of load growth forecasts that includes b~~Both historical data and future estimates.

4.5 ~~Both winter and summer peak demand for total Delmarva Delaware load and Delmarva Delaware SOS load by customer class. Load forecasts shall include both winter and summer peak demand for total Delmarva Delaware load and Delmarva Delaware SOS load by customer class, assuming a status quo for any programs which may impact forecast load estimates~~

~~Load estimates shall be w~~Weather adjustments, including consideration of climate change potential. Load Forecast shall include the following:

4.6 4

4.7 ~~1.1~~ Five (5) year historical loads, current year-end estimate and ten (10) year weather adjusted forecast showing individually and aggregated Delmarva Delaware and Delmarva Delaware SOS load, and both Delmarva Delaware and Delmarva Delaware SOS load disaggregated by customer classes, including both capacity (kW MW) and energy requirements (kWh MWh).

4.1.24.7 Analyses of how existing and forecast Conservation, DRload management, DSM, Customer-Sited Generation, various economic and demographic factors, including the prices of electricity and alternative energy sources, will affect the consumption of electric services, and how customer choice under Retail Competition of utility service may affect future loads.

4.1.34.8 Description of the process the company used to develop these forecasts. Forecasts shall include the probability of occurrence. Within the forecasting modeling descriptions the Company shall demonstrate how well its model predicted past load data for the prior five (5) years.

5.0 Resource Portfolio Options

~~5.15.8~~ The Company shall include a description of the overall process and the analytical techniques it used to identify its proposed ~~resource~~ options. The Company shall not rely exclusively on any particular resource or purchase procurement process.

~~5.25.9~~ The Company shall identify and evaluate all reasonable ~~generation~~, Supply Contracts, both short- and long-term procurement ~~or and demand- side and demand response management strategies~~, even if a particular strategy is ultimately not recommended by the Company. The IRP must show an investigation of all reasonable opportunities for a more diverse supply at the lowest reasonable cost. It shall contain a description of each option and an evaluation that considers the economic and environmental value of the following:

~~5.2.15.9.1~~ Resources that utilize New or Innovative Baseload Technologies;

~~5.2.25.9.2~~ Resources that provide short or long term Environmental Benefits to the citizens of this State;

~~5.2.35.9.3~~ Facilities that have existing fuel and transmission infrastructure;

~~5.2.45.9.4~~ Facilities that utilize existing brownfield or industrial sites;

~~5.2.55.9.5~~ Resources that promote Fuel Diversity;

~~5.2.65.9.6~~ Resources or facilities that support or improve Reliability; or

5.2.7. Resources that encourage Price Stability.

~~5.35.10~~ The Company shall provide a description of the ~~resource~~ options recommended for inclusion in the proposed plan, including a description of the mechanism or process used for valuing each option. Such valuation shall also include consideration for the life expectancy of the resource, if the resource provides capacity and/or energy, any improvements to system Reliability, the dispatchability of the source, any lead time requirements, the flexibility of the resource, the Generation Attributes of the resource, the efficiency of the resource, and the opportunities for customers' participation. The valuation shall assess the probability of securing the ~~resource~~ options according to modeling information used, including any key assumptions. The Company shall provide the estimated energy and ~~capacity~~ demand impacts for each ~~resource~~ option and the rationale behind the estimate.

~~5.45.11~~ Where Transmission Service is identified as a planning option, the Company shall describe the transmission enhancement, the location, and provide PJM's assessment of the impact of the proposed transmission asset when available.

~~5.55.12~~ At least 30 percent of the resource mix shall be acquired through the regional Wholesale Electricity Market via a bid procurement or auction process held by DP&L. (Docket No. 04-391).

~~5.65.13~~ The Company shall also include discussion of known plans to reduce existing physical, contractual or service related Portfolio resources during the IRP planning period.

5.14 As part of the evaluation required under paragraph 5.1, The Company shall summarize the results of non-Company evaluations of DSM and Conservation that are available through the Sustainable Energy Utility (or other organization as requested by the Commission). The summaries shall be on a measure-by-measure basis. The company also shall provide its own independent judgment of each measure evaluated. The fact that the Company relies on other non-Company DSM and Conservation evaluations does not relieve the Company of the obligation to integrate such findings into an overall IRP that seeks to systematically and optimally meet customers' needs at minimal cost. Where DSM or DR programs are proposed by the Company, it shall summarize the anticipated benefits with respect to load reductions and provide supporting material to justify the new program.

~~5.14~~ The Company shall evaluate all demand-side, technically feasible, and cost-effective ~~DR~~ improvements in the efficient use of electricity, including load management, Conservation, and energy efficiency programs. Where non-Company evaluations of DSM and Conservation are available through the Sustainable Energy Utility (or other organization as requested by the Commission), the Company shall summarize the results

and actions taken. ~~Where demand-side DR programs are new, the Company shall summarize the anticipated benefits with respect to load reductions and provide supporting material to justify the new program.~~

5.8 The Company shall assess the ~~r~~Resource Portfolio options against the set of Plan Objectives and criteria.

6.0 Plan Development

~~6.16.3~~ The Company shall conduct an Integrated Resource Evaluation in formulating its potential plans for supply and demand-side resource scenarios. The Company shall describe the mechanism or process by which the the Load Forecast and resource options have been blended into the various IRP scenarios. In integrating its supply and demand-side resources, the Company shall:

~~6.1.1~~ The IRP shall provide a discussion of how the Company might alter the recommended plan in the future if the key planning assumptions used to develop the recommended plan in the future if the key planning assumptions used to develop the recommended plan turn out to be different than what was assumed in preparing the recommended plan.

6.1.2 Evaluate the cost-effectiveness of the resource options from the perspectives of the utility and the different classes of ratepayers.

~~6.1.3~~ Estimate a range of tangible and intangible external costs, including, but not limited to health costs, on a life-cycle basis, to show how explicit consideration of them might affect selection of options. The Company shall quantify to the maximum extent feasible, the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.

~~Estimate a range of external costs which may be intangible, in order to show how explicit consideration of them might affect selection of resource options. The utility shall attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.~~

6.1.4 Evaluate the financial, competitive, Reliability, and operational risks associated with the resource options recommended by the IRP and how these risks may be mitigated over the 10 year planning period. Each candidate plan shall include a discussion of the likelihood of the occurrence of such risks.

6.1.5 For the options included in the proposed plan identified in the IRP, the IRP shall include an analysis of the fuel risk associated with the proposed Resource Portfolio and how such fuel risk ~~will~~ be mitigated when the proposed plan is implemented.

6.1.6 Perform sensitivity analyses on each of the candidate plans to include variations in key assumptions and to assess the likelihood of planned outcomes.

~~6.26.4~~ In developing candidate plans, special attention shall be given to ensuring consistency between the IRP and typical rate making processes. While the ultimate consumer price associated with the plan is important, the stability of rates and other factors as described in Section 5.2 need to be considered in any candidate plan selection.

7.0 Proposed Plan Selection.

7.1 ~~The Company shall select and file the proposed candidate~~ IRP which it believes is the most consistent with the criteria set forth in 26 Del. C. § 1007. The Company shall describe the rationale behind its selection, including any modeling or methodology used as the basis for selection of the proposed plan.

~~7.27.3~~ -In filing the preferred-proposed IRP, the Company shall provide at a minimum a five (5) year forecast of - supply rates by customer class that would be anticipated based on the IRP planning assumptions and recommended procurement strategy.

8.0 Implementation Plan

8.1 As part of the IRP, the Company shall file an action plan needed to implement the IRP. Such plan shall be a five (5) year action plan outlining the resource decisions intended to implement the IRP. The action plan shall include:

- 8.1.1 Actions to be taken in the first two (2) years and outline actions anticipated in the last three (3) years.
- 8.1.2 For IRP's filed on or after December 1, 2010, a status report of the specific actions contained in the previous action plan, including what risk assumptions were made and what actually occurred.
- 8.1.3 Schedule of key activities related to the plan implementation.

9.0 Review and Comment

9.1 As part of the process commencing in 2009 and continuing on an annual basis, the Company shall submit a report to the Commission, the Governor and the General Assembly detailing their progress in implementing their IRPs.

9.2 The Commission, interested State Agencies, interested parties and the general public shall be provided an opportunity for review and comment on the Company's IRP filings.

9.3 Subsequent to the IRP filing, staff and public analysis and comment, discovery, evidentiary and public hearings, and staff recommendations, the Commission and interested State Agencies may approve the filing of the Company's IRP and its compliance with these regulations. Approval of the IRP shall not guarantee a particular ratemaking treatment of future resource acquisitions. Subsequent to the

~~IRP filing and public comment, the Commission and interested State Agencies may acknowledge the filing of the Company's IRP and its compliance with these regulations. Acknowledgement that the IRP complies with the statute, these rules and does not appear to be unreasonable, will shall not guarantee a particular ratemaking treatment of future resource acquisitions.~~ To the extent that the Commission determines that the IRP is not compliant with the statute or is unlikely to meet the goals of the statute, the Company shall revise its IRP to meet these requirements. Rate treatment ~~will~~ shall be addressed in rate or other proceedings as filed by the utility or as initiated by the Commission.

9.4. The Integrated Resource Plan may be used as a factor in rate cases to evaluate the performance of the utility. Reports provided under this regulation are subject to annual review and audit by the Commission and interested State Agencies. The Company must maintain sufficient records to permit a review and confirmation of material contained in all required reports.

A T T A C H M E N T "C"

State of Delaware

Delaware Public Service Commission

Integrated Resource Planning Regulation

HEARING EXAMINER'S PROPOSED VERSION

October 24, 2008

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1.0 General

- 1.1. The reliability of electric service and the security of energy supply are of great importance to the Delaware Public Service Commission ("Commission"), because they are essential services to the citizens of Delaware. This regulation, in support of 26 Del. C. §1007, sets forth the minimum Delmarva Power and Light ("DP&L" or "Company") Integrated Resource Plan ("IRP" or "the Plan") requirements needed to ensure a cost effective, price stable, reliable, efficient and environmentally sound energy supply for all Standard Offer Service ("SOS") customers.
- 1.2 Nothing in this regulation relieves DP&L from compliance with any requirement set forth under any other regulation, statute, or order. Compliance with this regulation meets the minimum IRP requirements. Compliance with this regulation does not imply plan approval or automatic cost recovery.
- 1.3 In accord with 26 Del. C. §1007, DP&L, as the Standard Offer Service Supplier, shall file an IRP on December 1st, 2006 and on the anniversary date of the first filing date every other year thereafter (i.e. 2008, 2010 et seq.). The Company may request and the Commission may change the filing date for good cause shown. These regulations shall apply to all IRPs filed pursuant to 26 Del. C. §1007. These regulations shall not apply to an IRP docket opened prior to the effective date of these regulations.
- 1.4 The IRP shall be filed in compliance with normal Commission policies and practices.
- 1.5. The plan shall identify the year of the filing, the individuals responsible for its preparation and those individuals who shall be available to respond to inquiries during the Commission's review of the plan.
- 1.6. Because an IRP may contain business sensitive information, the Company may request that information, required under this regulation, be classified as confidential, proprietary and/or privileged material. The Company must attest that such information is not subject to inspection by the public or other parties without execution of an appropriate proprietary agreement. In requesting such treatment of information the Company is also obligated to file an additional copy of the information, excluding the confidential or proprietary information. The Commission, in accordance with Rule 11, Rules of Practice and Procedure of the Delaware Public Service Commission, effective May 10, 1999, shall treat such information as "confidential, not for public release" upon receipt of a properly filed request. Any dispute over the Hearing Examiner. Confidential utility documents shall be presented under separate seal.
- 1.7. Commission Acknowledgement of a filed IRP implies only that the plan is in compliance with the initial filing requirements of this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012. The acknowledgement of an IRP does not confer or imply Commission approval unless so stated by an Order of the Commission. Approval or disapproval of an IRP must be made by the Commission after, at a minimum, Staff's analysis of and public comment on the proposed IRP. Any specific ratemaking treatment for the plan or any portions thereof is neither directly nor indirectly guaranteed by virtue of the acknowledgement.
- 1.8. The utility shall provide whatever detail and commentary necessary to demonstrate that it has met or exceeded the planning requirements as set forth in this regulation. An effort shall be made to ensure that the IRP is clearly stated and can be readily comprehended by the Commission, State Agencies, and other interested parties. The IRP shall include an Executive Summary.
- 1.9 Compliance with this regulation is a minimum standard for IRPs. The Company needs to exercise its professional judgment based on its systems and customer needs. The Company shall include all information that assists the reader to fully understand the IRP concept and the Company's plans to meet SOS energy needs.
- 1.10 This regulation requires the maintenance and retention of supply resource planning data and the reporting of plan achievements on an annual basis starting in 2009 to the Commission, Governor and General Assembly. The Company shall retain such data, consistent with Federal data retention guidelines and make it available for further review as necessary.

- 1.11 The Company shall submit a total of 14 copies of its IRP - eight (8) copies to the Commission, two (2) copies to the Controller General's office, two (2) copies to the Office of Management and Budget, and two (2) copies to the Energy Office. The Commission may request up to six (6) additional copies of combined and common filings as may be necessary for review.
- 1.12 These Integrated Resource Planning Regulations shall be effective for IRP dockets opened after the effective date of these regulations and may be reviewed, revised, or extended as necessary to ensure continued compliance with 26 Del. C. § 1001-1012 and to ensure adequate SOS energy supply.
- 1.13. Failure of the Company to file an IRP or to provide progress reports as required may subject the Company to the penalty and remedial provisions of the Delaware statute (26 Del. C. § 1019).

2.0 Definitions

The following words and terms, as used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise.

"Brownfield" or "Industrial site" means a site that has been previously used for industry and may be contaminated, or need environmental remediation for continued use or redevelopment.

"Capacity" means the maximum power capability of a piece of equipment. For example, a generating unit might have a rated capacity of 50 megawatts.

"Commission" means the Delaware Public Service Commission.

"Commission Acknowledgement" means that the Commission enters into an order that finds the plan is in compliance with the initial filing requirements of this regulation and the Electric Utility Retail Customer Supply Act of 2006 ("Act"), 26 Del. C. § 1001-1012.

"Conservation" means any reduction in electric power consumption that results from improved efficiency, avoidance of waste, reduced consumption, or other energy usage reductions that may result from installing new equipment, modifying existing equipment to improve efficiency, adding insulation or changing behavior patterns.

"Customer-Sited Generation" means a generation unit that is interconnected on the end-use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

"Demand Response ("DR")" means programs that are designed specifically to reduce electricity demand during periods of supply constraint. These programs do not necessarily reduce total annual energy consumption.

"Demand-Side Management ("DSM")" means cost effective energy efficiency programs that are designed to reduce customers' electricity consumption, especially during peak periods.¹

"DNREC" means the Department of Natural Resources and Environmental Control

"DP&L" or "Company" means Delmarva Power & Light Company, Inc. or its successor organizations.

"Energy" means electrical energy. In this sense, energy is a measure of the quantity of units of electricity used in a given time period, measured in megawatt- hours.

"Environmental Benefit" means the positive environmental impact of environmental services, practices or other ecological influences attained by specific actions, minus the negative environmental impacts caused by those actions. Staff will give due consideration to input from DNREC.

¹26 Del. C. § 1001 (5).

“Fuel Diversity” means the utilization of resources to supply energy to SOS customers that are procured in such a way as to diminish the risk of adverse changes in fuel prices for electric generation, either through a mix of electric generating resources that utilize a variety of fuel sources, fuel hedges, Customer-Sited Generation resources, both renewable and nonrenewable, application of appropriate risk management practices, DSM or a combination of these activities and assets.

“Generation Attributes” means non-price characteristics of the electrical energy output of a generation unit including, but not limited to, the units fuel type, geographical location, emissions, vintage and Renewable Energy Portfolio Standards (26 Del. C. § 351-363) eligibility.

“Implementation Plan” means an action plan which outlines the short and long term planned actions of the Company to secure necessary energy, capacity, transmission and other appropriate resources as further described in the Integrated Resource Plan.

“Integrated Resource Plan (IRP)” means the planning process of an Electric Distribution Company that systematically evaluates all available options, including but not limited to: generation, Supply Contracts, transmission and Demand-Side Management programs during the planning period to ensure that the electric distribution Company acquires sufficient and reliable resources over time that meet their customers’ needs at a minimal cost.²

“Integrated Resource Evaluation” means a process within the IRP that considers and compares supply- and demand-side resources to select a final resource mix.

“Load Forecast” means the estimated future annual electricity usage, that is used to help electric utilities make resource allocation decisions.

“New or Innovative Baseload Technologies” means energy resources using new technologies to generate electricity on a typical round- the- clock basis.

“PJM Interconnection, L.L.C. (PJM)” means the Regional Transmission Organization or successor organization that is responsible for wholesale electricity markets and the interstate transmission of electricity throughout a multi-state operating area that includes Delaware.

“Portfolio” or “Resource Portfolio” means the combination of physical assets (e.g. electric generating, self generating, and transmission assets), financial products (e.g. Supply Contracts for energy and related services), market resources (e.g. spot market energy purchases), DSM and DR programs, and Customer-Sited Generation resources, both renewable and non renewable, that the Electric Distribution Company uses to satisfy current and future energy procurement requirements for SOS customers, while managing the risk of adverse price changes to SOS customers.

“Plan Objectives” means the targets or goals of an IRP plan needed to measure the impact and/or success of the plan’s actions. Such goals or targets must be definitive, measurable and verifiable. Refer to 1.1 for IRP objectives.

“Price Stability” means the lack of significant variation in the actual price paid by SOS customers over the planning period.

“Reliability” means the degree of performance of the elements of the bulk electric system that results in electricity being delivered to customers within accepted standards and in the amount desired. Reliability may be measured by the frequency, duration, and magnitude of adverse effects on the electric supply. Electric system Reliability can be addressed by considering two basic and functional aspects of the electric system – Adequacy and Security.

²26 Del. C. § 1001(13).

Adequacy is the ability of the electric system to supply the aggregate electrical demand and energy requirements of customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.

Security is the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.³

As applied to distribution facilities, Reliability is further described as the degree to which safe, proper and adequate electric service is supplied to customers without interruption.

"Resource Portfolio" see "Portfolio"

"Retail Competition" means the right of a customer to purchase electricity from a certified electric supplier.

"Standard Offer Service ("SOS")" means the provision of electric supply service by a Standard Offer Service Supplier to customers who do not otherwise receive electric supply service from a certified electric supplier.

"Standard Offer Service Supplier" means the electric distribution company serving within its certificated service territory.

"Supply Contracts" means short or long term power procurement contracts as may be negotiated and agreed upon to meet defined requirements, more specifically for Delaware's Standard Offer Service customers.

"Transmission Service" means the delivery of electricity from supply sources through transmission facilities to distribution system interconnection points.

"Scenario Analysis" means a component of integrated resource planning that analyzes and assigns probabilities to a variety of possible future conditions and the options available to deal with them. Its primary purpose is to facilitate better resource planning decisions by assessing and quantifying the economic and other risks related to a particular decision.

"Wholesale Electricity Market" means the various PJM markets in which the purchase and sale of electric energy, capacity, and ancillary services from generators to resellers/wholesale suppliers (who sell to retail customers) takes place at the transmission level.

3.0 General Requirements

3.1 Consistent with the requirements of 26 Del. C. §1007 and this regulation, the Company shall file an IRP every two years, starting on December 1 of the first even-numbered year after the effective date of these regulations, that adheres to the following general principals:

3.1.1 The IRP shall provide a framework for comparing a comprehensive resource mix of supply- and demand-side and Transmission Service resource costs and attributes.

3.1.2 The IRP shall utilize a Resource Portfolio in achieving the objectives of the IRP, shall incorporate a Portfolio approach to securing resources and incorporating an analysis of risk versus certainty into the planning process, or absent such a Portfolio approach, the rationale supporting the exclusion.

3.1.3 The IRP process shall provide for regulatory, stakeholder and public input.

3.1.4 The IRP shall include provisions for the IRP to be modified from time to time, as may be necessary to conform with any subsequent legislative or regulatory directives.

3.2 The IRP shall include the following minimum requirements:

³NERC definition - NERC's Reliability Assessment 2001-2010, dated October 16, 2001.

- 3.2.1. An executive summary with a short description of the utility, its customers, service territory, current facilities, planning objectives, notable areas of departure in the new IRP from the old, citing specific location within the IRP where the new aspects shall be found, Load Forecast, recommended Resource Portfolio and action plan.
- 3.2.2 Established Plan Objectives in quantitative and qualitative terms by which the plan achievements may be measured and shall not be biased against any particular option. Measures must be ascribed to each objective. The Company must include a summary of the overall process, and models used in developing the IRP.
- 3.2.3 A description of the load forecast, the assumptions used or implicit in creating the forecast, the range of forecast examined, and the forecast selected for the filing period.
- 3.2.4 A listing of all the options considered to meet the load forecast, identification of those chosen for further evaluation and possible inclusion in the plan, and a discussion of the rationale for such selections including any key assumptions. This planning information shall include a 10-year planning horizon, starting with the year immediately following the filing year (i.e. filing year of 2010 shall include planning information for years 2011 through 2020).
- 3.2.5 A description of the Scenario Analysis used to integrate the options into a single resource plan or individual scenario for further review and analysis, to include a listing of the various scenarios considered and any key assumptions.
- 3.2.6 A description of the process used to develop the proposed IRP, including the assumptions and analysis leading up to the decision and the application of the valuation criteria as specified in section 5.0.
- 3.2.7 An analysis of the risk and sensitivity of the proposed IRP in comparison to other options also considered.
- 3.2.8 Action plans for implementation of the IRP, for no less than five (5) years, starting with the year immediately following the filing year.

4.0 Load Forecast

- 4.1 The Company shall consider a range of load growth forecasts that include:
 - 4.1.1 Both historical data and future estimates.
 - 4.1.2 Both winter and summer peak demand for total Delmarva Delaware load and Delmarva Delaware SOS load by customer class.
 - 4.1.3 Weather adjustments, including consideration of climate change potential.
 - 4.1.4 Five (5) year historical loads, current year-end estimate and ten (10) year weather adjusted forecast showing individually and aggregated Delmarva Delaware and Delmarva Delaware SOS load, and both Delmarva Delaware and Delmarva Delaware SOS load disaggregated by customer classes, including both capacity (MW) and energy requirements (MWh).
 - 4.1.5 Analyses of how existing and forecast Conservation, DR, DSM, Customer-Sited Generation, various economic and demographic factors, including the price of electricity, will affect the consumption of electric services, and how customer choice under Retail Competition of utility service may affect future loads.
 - 4.1.6 Description of the process the company used to develop these forecasts. Forecasts shall include the probability of occurrence. Within the forecasting modeling descriptions the Company shall demonstrate how well its model predicted past load data for the prior five (5) years.

5.0 Resource Portfolio Options

- 5.1 The Company shall include a description of the overall process and the analytical techniques it used to identify its proposed options. The Company shall not rely exclusively on any particular resource or purchase procurement process.
- 5.2 The Company shall identify and evaluate all reasonable generation, Supply Contracts, both short- and long-term procurement and demand- side and demand response management strategies , even if a particular strategy is ultimately not recommended by the Company. The IRP must show an investigation of all reasonable opportunities for a more diverse supply at the lowest reasonable cost. It shall contain a description of each option and an evaluation that considers the economic and environmental value of the following:
 - 5.2.1 Resources that utilize New or Innovative Baseload Technologies;
 - 5.2.2 Resources that provide short or long term Environmental Benefits to the citizens of this State;
 - 5.2.3 Facilities that have existing fuel and transmission infrastructure;
 - 5.2.4 Facilities that utilize existing brownfield or industrial sites;
 - 5.2.5 Resources that promote Fuel Diversity;
 - 5.2.6 Resources or facilities that support or improve Reliability; or
 - 5.2.7 Resources that encourage Price Stability.
- 5.3 The Company shall provide a description of the options recommended for inclusion in the proposed plan, including a description of the mechanism or process used for valuing each option. Such valuation shall also include consideration for the life expectancy of the resource, if the resource provides capacity and/or energy, any improvements to system Reliability, the dispatchability of the source, any lead time requirements, the flexibility of the resource, the Generation Attributes of the resource, the efficiency of the resource, and the opportunities for customers' participation. The valuation shall assess the probability of securing the options according to modeling information used, including any key assumptions. The Company shall provide the estimated energy and capacity impacts for each option and the rationale behind the estimate.
- 5.4 Where Transmission Service is identified as a planning option, the Company shall describe the transmission enhancement, the location, and provide PJM's assessment of the impact of the proposed transmission asset when available.
- 5.5 At least 30 percent of the resource mix shall be acquired through the regional Wholesale Electricity Market via a bid procurement or auction process held by DP&L. (Docket No. 04-391.)
- 5.6 The Company shall also include discussion of known plans to reduce existing physical, contractual or service related Portfolio resources during the IRP planning period.
- 5.7 The Company shall evaluate all technically feasible and cost effective DR improvements. Where non-Company evaluations of DSM and Conservation are available through the Sustainable Energy Utility (or other organization as requested by the Commission), the Company shall summarize the results and actions taken. Where DR programs are new, the Company shall summarize the anticipated benefits with respect to load reductions and provide supporting material to justify the new program. Any Company proposed DSM program rejected by the SEU may be included in the IRP.
- 5.8 The Company shall assess the Resource Portfolio options against the set of Plan Objectives and criteria.

6.0 Plan Development

- 6.1 The Company shall conduct an Integrated Resource Evaluation in formulating its potential plans for supply and demand-side resource scenarios. The Company shall describe the mechanism or process by which the the Load Forecast and options have been blended into the various IRP scenarios. In integrating its supply and demand-side resources, the Company shall:

- 6.1.1 Provide a discussion of how the Company might alter the recommended plan in the future if the key planning assumptions used to develop the recommended plan in the future turn out to be different than what was assumed in preparing the recommended plan.
- 6.1.2 Evaluate the cost-effectiveness of the options from the perspectives of the utility and the different classes of ratepayers.
- 6.1.3 Estimate a range of external costs which may be intangible, in order to show how explicit consideration of them might affect selection of options. The utility shall attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.
- 6.1.4 Evaluate the financial, competitive, Reliability, and operational risks associated with the options recommended by the IRP and how these risks may be mitigated over the 10 year planning period. Each candidate plan shall include a discussion of the likelihood of the occurrence of such risks.
- 6.1.5 For the options included in the proposed plan identified in the IRP, the IRP shall include an analysis of the fuel risk associated with the proposed Resource Portfolio and how such fuel risk will be mitigated when the proposed plan is implemented.
- 6.1.6 Perform sensitivity analyses on each of the candidate plans to include variations in key assumptions and to assess the likelihood of planned outcomes.
- 6.2 In developing candidate plans, special attention shall be given to ensuring consistency between the IRP and typical rate-making processes. While the ultimate consumer price associated with the plan is important, the stability of rates and other factors as described in Section 5.2 need to be considered in any candidate plan selection.

7.0 Proposed Plan Selection.

- 7.1 The Company shall select and file the proposed IRP which it believes is the most consistent with the criteria set forth in 26 Del. C. § 1007. The Company shall describe the rationale behind its selection, including any modeling or methodology used as the basis for selection of the proposed plan.
- 7.2 In filing the proposed IRP, the Company shall provide at a minimum a five (5) year forecast of supply rates by customer class that would be anticipated based on the IRP planning assumptions and recommended procurement strategy.

8.0 Implementation Plan

- 8.1 As part of the IRP, the Company shall file a plan needed to implement the IRP. Such plan shall be a five (5) year action plan outlining the resource decisions intended to implement the IRP. The Implementation plan shall include:
 - 8.1.1 Actions to be taken in the first two (2) years and outline actions anticipated in the last three (3) years.
 - 8.1.2 For IRP's filed on or after December 1, 2010, a status report of the specific actions contained in the previous action plan, including what risk assumptions were made and what actually occurred.
 - 8.1.3 Schedule of key activities related to the plan implementation.

9.0 Review and Comment

- 9.1 As part of the process commencing in 2009 and continuing on an annual basis, the Company shall submit a report to the Commission, the Governor and the General Assembly detailing their progress in implementing their IRPs.

- 9.2 The Commission, interested State Agencies, interested parties and the general public shall be provided an opportunity for review and comment on the Company's IRP filings.
- 9.3 Subsequent to the IRP filing and public comment, the Commission and interested State Agencies may acknowledge the filing of the Company's IRP and its compliance with these regulations. Acknowledgement that the IRP complies with the statute shall not guarantee a particular ratemaking treatment of future resource acquisitions. To the extent that the Commission determines that the IRP is not compliant with the statute or is unlikely to meet the goals of the statute, the Company shall revise its IRP to meet these requirements. Rate treatment shall be addressed in rate or other proceedings as filed by the utility or as initiated by the Commission.
- 9.4. The Integrated Resource Plan may be used as a factor in rate cases to evaluate the performance of the utility. Reports provided under this regulation are subject to annual review and audit by the Commission and interested State Agencies. The Company must maintain sufficient records to permit a review and confirmation of material contained in all required reports.

A T T A C H M E N T "D"

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF DELAWARE

IN THE MATTER OF THE INVESTIGATION)
 INTO THE ADOPTION OF PROPOSED)
 RULES AND REGULATIONS TO ACCOMPLISH)
 INTEGRATED RESOURCE PLANNING FOR THE) PSC REGULATION DOCKET NO.60
 PROVISION OF STANDARD OFFER SERVICE)
 BY DELMARVA POWER & LIGHT COMPANY)
 UNDER 26 DEL. C. § 1007(c) & (d))
 (OPENED AUGUST 21, 2007))

ORDER NO.

AND NOW, this day of , 2008,

WHEREAS, in PSC Order No. 7263 (Aug. 21, 2007, the Commission opened this docket to consider promulgating rules that will govern Delmarva Power & Light Company's ("DP&L") development of integrated resource plans, or IRPs, for its Standard Offer Service ("SOS") customers, as authorized by the "Electric Utility Retail Customer Supply Act of 2006" ("the Act").¹⁵ Pursuant to that Order, the Commission Staff drafted proposed IRP rules after consulting with the parties and participants in DP&L's ongoing IRP docket (PSC Dckt. No. 07-20) and with the three (3) state agencies involved in DP&L's IRP process.¹⁶ On November 14, 2007, Staff submitted a set of proposed rules entitled "Integrated Resource Planning Regulation;" and

¹⁵See 26 Del. C. § 1007(c)(1) c. (as amended by 75 Del. Laws ch. 242 § 6 (2006)).

¹⁶Under 26 Del. C. § 1007(c), DP&L files its IRP on a biennial basis with the Commission, the Delaware Energy Office, the Controller General, and the Director of the Office of Management and Budget.

WHEREAS, in PSC Order No. 7318 (Dec. 4, 2007, the Commission accepted Staff's draft rules and initiated the formal rule-making procedure dictated by the Administrative Procedures Act ("APA");¹⁷ and

WHEREAS, in PSC Order No. 7318, the Commission directed publication in the Delaware Register (among other places) of Staff's revised proposed IRP Rules and directed a Hearing Examiner to conduct proceedings regarding the proposed IRP rules; and

WHEREAS, after holding a duly-noticed public evidentiary hearing, the Hearing Examiner has now submitted her Findings of Fact and Recommendations, dated October 24, 2008, in which the Hearing Examiner recommends Commission approval of Staff's final proposed IRP Rules with revisions proposed by the Hearing Examiner, which include certain substantive and non-substantive changes made after the initial publication in the Delaware Register; and

WHEREAS, the Commission finds that the proposed revisions to the Integrated Resource Plan Rules are just and reasonable and that adoption of the Hearing Examiner's Report is in the public interest. Such revised rules are set forth as Exhibit "A" to this Order.

Now, therefore, **IT IS ORDERED**:

1. That, by and in accordance with the affirmative vote of a majority of the Commissioners, the Commission hereby adopts the Findings and Recommendations of the Hearing Examiner (Oct. 24, 2008) set forth as Exhibit "A" to the original of this Order.

2. That the Commission hereby adopts and approves the proposed Integrated Resource Plan Rules attached to the Hearing Examiner's

¹⁷See 29 Del. C. § 10111, et. seq.

2. That the Commission hereby adopts and approves the proposed Integrated Resource Plan Rules attached to the Hearing Examiner's Finding and Recommendations as "Attachment "C." The Secretary of the Commission shall transmit to the Registrar of Regulations for publication in the Delaware Register the exact text of the Rules attached hereto as Exhibit "B" for publication on _____, 2008.

3. The effective date of this Order shall be the later of - _____ or ten (10) days after the date of publication in the Delaware Register of the Regulations attached to the original hereof as Exhibit "B".

4. That the Commission reserves the jurisdiction and authority to enter such further Orders in this matter as may be deemed necessary or proper.

BY ORDER OF THE COMMISSION:

Chair

Commissioner

Commissioner

Commissioner

Commissioner

ATTEST:

Secretary